For exchange of information on nutrition programs and activities

NUTRITION PROGRAM NEWS

U. S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

SEPTEMBER-OCTOBER 1965

NUTRITION EDUCATION FOR SPECIAL PROGRAMS — DIABETES AND ARTHRITIS

MARY M. HILL, ED. D., NUTRITIONIST, CONSUMER AND FOOD ECONOMICS RESEARCH DIVISION

Our readers have expressed concern to members of the Interagency Committee on Nutrition Education about the need for making reliable nutrition information more available. They have asked for practical examples of —

1. How the limited number of trained nutritionists can contribute most effectively to the many chronic disease problems in the community.

2. Ways of combating food faddism.

In this issue of Nutrition Program News, we report on the Federal-State program for the control of diabetes and arthritis. We point up —

1. How nutritionists are working with members of allied professions to extend community programs.

2. The long-range value of sound nutrition education in combating the food faddist while teaching individuals how best to live with chronic diseases, such as diabetes and arthritis.

We are indebted to the staff of the Diabetes and Arthritis Program, Division of Chronic Diseases, Public Health Service, U.S. Department of Health, Education, and Welfare, for assisting us in preparing this issue. We also wish to thank State nutritionists for sending us descriptions of activities that contribute to control of diabetes and arthritis.

The chief objective of nutrition education is to help each person learn to select for himself combinations of food to meet his needs for nutrients and food energy. Through proper food selection, individuals can achieve a level of health and well-being that permits them to get the most out of life.

Food intake is an important component in preventing or alleviating symptoms and in curbing diabetes and arthritis. Diabetics must learn food selection to meet nutrient and energy needs and—at the same time—to control the disease. A modified diet usually is prescribed. Arthritics must learn to maintain a desirable level of health and to control their weight.

The diabetic patient—as well as the arthritic patient—must fully understand his nutritional needs in relation to the state of his health. He must realize that although food will contribute to the control of the disease, it will not—of itself—effect a cure. If he does not learn this lesson, the patient may fall prey to the extravagant claims of the food faddist. Nutrition education for such patients is indeed an essential part of their medical management.

OVERVIEW OF THE PUBLIC HEALTH SERVICE DIABETES AND ARTHRITIS PROGRAM

Diabetes

The National Health Survey estimates that there are 2 million undetected cases of diabetes in the United States today. Because there are so many undetected cases, the Federal program directs attention to the refinement of screening techniques to locate "hidden" diabetics.

The Federal program also focuses on improvement of services that are currently available to the 2 million diagnosed diabetics under treatment in the United States. Because diet is closely associated with treatment, nutrition activities are an integral part of the total effort to control the disease. Studies are being conducted on factors that contribute to identification and management of diabetes.

Obesity.—Obesity apparently contributes to the onset of diabetes. Weight control, therefore, is a factor.

The current literature on the relation of diet and obesity to diabetes is constantly reviewed to keep patient services up-to-date. Today, nutrition education emphasizes weight control as a part of physical fitness. An exhibit on obesity

prevention is available from the Diabetes and Arthritis Program.

Detecting the disease.—Early detection of diabetes makes it possible to control the disease in most cases, or —at least—to delay the onset of overt diabetes. Much attention is given to developing and improving screening techniques that will lead to early detection of the disease by health agencies, clinics, and private physicians.

Nutritionists in the Federal program recommend a suitable high-carbohydrate intake about 2 hours before a blood-sugar test for diabetes screening. A high-carbohydrate cola drink is available for use in local diabetes detection programs.

Education of diabetics and their families.— Basic information about diabetes is essential to the management of the disease. The patient and his family need to understand the disease condition and to realize that he can lead a useful and satisfying life if he will adhere to a health program tailored to his needs.

Treatment of the diabetic includes medical supervision, nursing and nutrition services, and vocational and social services. Patients may receive these services in hospitals, outpatient clinics, nursing homes, and camps, and from private physicians or community health agencies.

Federal nutritionists contribute to the local effort by—

1. Interpreting current concepts of dietary management of diabetes to professional workers, thus improving the dietary guidance given by physicians, nurses, dietitians, and nutritionists in institutions or community agencies.

2. Promoting community educational programs and counseling services for persons with diabetes and obesity.

3. Providing consultation to health agencies on services, projects, and studies involving dietary aspects of diabetes.

The activities of Federal nutritionists include—

1. Participating in professional meetings, workshops, seminars, and short-term training courses for workers in all disciplines.

2. Preparing teaching aids and distributing information, selected reference lists, and reprints to professional workers.

3. Writing articles for professional journals.

4. Working with a joint committee—American Diabetes Association, American Dietetic Association, and Public Health Service—on diabetes diet materials.

5. Providing consultation on professional and patient scripts for programmed instruction courses on diabetes.

Arthritis

The National Health Survey shows that nearly 13 million Americans are afflicted with arthritis and rheumatism. The staff of the Diabetes and Arthritis Program focuses attention on arthritis as a public health problem. It promotes activities that prevent disability, deformity, and dependency. It also seeks new knowledge relating to control of arthritis.

Because our knowledge—and therefore our treatment—of arthritis is limited, arthritics are most susceptible to quackery and faddism. Nutrition education emphasizes authoritative information on diet and arthritis as a means of combating misinformation and food faddism.

Obesity is associated with osteo-arthritis as well as with diabetes. Overweight may put a burden on joints and cause greater inflammation and pain. For this reason, nutritionists emphasize the need for arthritic patients to maintain a desirable weight.

Nutritionists in the Public Health Service program provide many of the same type of services for arthritis that they provide for diabetes. For example, they worked with a joint committee—American Dietetic Association, the Arthritis Foundation, and Public Health Service—to develop "Diet and Arthritis," a publication for arthritic patients. The Diabetes and Arthritis Program staff developed a related filmstrip and program guide for use by professional workers.

Research

Through research grants, the Diabetes and Arthritis Program staff seeks to improve knowledge concerning predisposing factors, prevalence, and improved techniques for effectively controlling diabetes, arthritis, obesity, and other metabolic diseases.

Nutritionists contribute to this research by—

1. Providing consultation on studies that have a nutritional component, such as those dealing with abnormal carbohydrate metabolism during pregnancy.

2. Providing guidance for studies of the reproducibility of the oral glucose tolerance test.

3. Participating in the development and pretesting of a questionnaire for diabetics, prepared by the National Health Survey staff.

The Public Health Service staff seeks to refine techniques of identifying potential diabetics and to evaluate the influence of obesity, pregnancy, emotions, and infectious diseases on them. This information—added to increasing knowledge in the field of genetics—may offer clues to a preventive approach to diabetes.

Many communities have developed projects to serve patients with rheumatoid arthritis. The success of these projects indicates that the disease can be minimized with proper management, including physical therapy. Sound nutrition education reduces economic losses, encourages

early use of therapy, and combats quackery. Nutritionists will continue to contribute to such projects.

STATE PROGRAMS

For some years, nutritionists in State Health Departments have cooperated with physicians, nurses, dietitians, and other health workers to help patients with diabetes. More recently, these groups have helped patients with arthritis. After patients understand their condition, they can help themselves by accepting and following a health plan, including a diet, tailored to their individual needs.

The resources provided by the staff at the national level in the Public Health Service are used to implement these local programs. Nutritionists at the State and local levels contribute to the Federal program by—

1. Participating in the testing of materials and ideas.

2. Extending to the local level the interpretations of research in terms of realistic activities.

3. Adapting suggestions for programs and services to unique local and State situations.

Michigan

For many years, State nutrition consultants have participated in classes for diabetics. These classes are cosponsored by local health departments, medical societies, and—in some cases—hospitals. Nutrition and diet are included to help diabetics and their families understand the necessary total care.

Institute on Education of the Diabetic and Family.—A need was seen for improved instruction and counseling of the diabetic and his family. With funds provided by a short-term training grant from the U.S. Public Health Service, an Institute was conducted to extend the knowledge and skills of nurses, dietitians, nutritionists, and physicians in this area.

The Institute was held at the School of Public Health, University of Michigan, Ann Arbor, May 18-20, 1965. It was cosponsored by the School of Public Health, the Michigan Department of Health, and the Michigan Diabetes Association, in cooperation with the U.S. Public Health Service.

The program was well received. The 60 participants reported they had learned much that could be incorporated into local programs.

All meetings were interdisciplinary; areas of common interest were highlighted. Perhaps the most significant outcome of the Institute was the increase in understanding of and respect for the roles of the various disciplines involved in the total effort to control diabetes.

Effectiveness of questionnaire.—During 1963-64, Michigan nutrition consultants assisted in field testing a Food Preference Questionnaire, designed to improve diet counseling for diabetics. It was developed by the staff of the Public Health Service Diabetes and Arthritis Program. It is hoped that the questionnaire will prove to be a time-saving substitute for an individual interview. From the diet history revealed by the questionnaire, it may be possible for a nutritionist to tailor meal plans to the patient's needs and eating habits.

Early in 1965, the Nutrition Section of the Michigan Department of Health began further tests of the questionnaire's value. In this follow-up study of new diabetes cases, the Michigan Department of Health, the University of Michigan Medical Center Hospital, and the U.S. Public Health Service Diabetes and Arthritis Program are cooperating.

Patients are grouped according to the way the meal plan is introduced at the time of discharge. The three categories:

1. A meal plan based on a meeting of nutritionist and patient, the Food Preference Questionnaire, and the patient's diet prescription.

2. A meal plan based on the patient's diet history—taken by a nutritionist during an interview—plus the patient's diet prescription.

3. A standard meal plan, which the patient receives without nutritional consultation.

Nutrition consultants make home visits 3 and 9 months after the patient is discharged. They gather information on how each patient is managing his diet. The study will—

1. Evaluate the effectiveness of the three methods of meal-plan introduction.

2. Identify gaps in diet counseling.

3. Provide a basis for revising methods and materials for use in counseling persons with diabetes.

Wyoming

Until October 1963, diabetic patients received individual—but varied—dietary instruction.

Public health nurses and local physicians recognized a need for a planned community program to help the diabetic and his family understand diabetes control.

A pilot project in nutrition education was conducted in Hot Springs County. The project's objectives:

1. To create an awareness of diabetes and the importance of early detection and control.

2. To help families develop a positive attitude toward diabetes and its treatment.

3. To provide diabetics and their families an oppot tunity to share ideas and methods of patient care.

Each class member submitted a physician's referral and was asked to complete a 3-day diet record. Before classes began, each participant filled out—

1. An application form, supplying information about diet prescription, food preferences, and place of food preparation (home, restaurant, or other).

2. A Diabetes Education Class Questionnaire, designed to reveal how much the patient knows about his condition and diet management.

Class members discussed the disease in relation to medication, physical activity, and nutrition. Specific topics were principles of basic nutrition, use of exchange lists in planning individual diets, purchasing of food, planning low-cost meals, tailoring diet orders to individual food preferences, and the use of snacks and alcoholic beverages. At the final meeting an appropriate dinner was served to each class member.

All available resources—both material and human—were used to make the classes effective. Evaluation by both the participants and the staff pointed up some of the problems. One was the need to explain the disease in simple language.

The experience and information gathered in the pilot project have been used in developing guidelines for teaching diabetes control in other Wyoming communities.

Pennsylvania

Public health workers in Pennsylvania have long recognized that help for arthritic patients in the State depends on reaching into local communities with authoritative information.

Nutritionists are concerned with convincing arthritics of the value of a proper diet, eaten regularly. Although it does not in itself effect a cure, a good diet helps to maintain good health and muscle tone and to improve the ability to resist the ravages of disease—in this case, arthritis.

To combat the costly claims of the food faddist—both in money and misery due to delayed treatment—nutritionists and workers in allied professions stress the following facts:

1. Nutritional needs of the arthritic—like those of the healthy individual—can be met with food purchased in any reliable food market.

2. "Diet and Arthritis" can be used to help the arthritic make food selections that will provide a good nutritional foundation and at the same time help control weight.

3. There is no need for expensive supplements or unusual foods purchasable only in "health" stores—in fact, these may not be conducive to adequate diets.

Institutes on Diet and Arthritis.—Members of the Pennsylvania Department of Health, Pennsylvania Dietetic Association, and Pennsylvania Arthritis Foundation planned seven 1-day regional institutes with the endorsement of the Pennsylvania Medical Society. They were held in September and October 1964 for the professional workers who contact arthritic patients and their families.

Included among the 1,052 participants were physicians, dietitians, nutritionists, public health nurses, hospital nurses, physical and occupational therapists, social workers, health educators, home economists in the Agricultural Extension Service, college home economics instructors, and representatives of Pennsylvania chapters of the Arthritis Foundation.

The chief objective was to stimulate community action in providing nutrition services for arthritics and their families. The Institutes also introduced the booklet, "Diet and Arthritis," to leaders in professional groups.

The program topics and the lecturers:

1. Recent advances in the treatment of arthritis, presented by a physician.

2. Nutritional opportunities in the treatment of arthritis, presented by a public health nutritionist.

3. Aids to independence in food preparation and feeding, presented by an occupational therapist.

4. Improving nutrition services for arthritic patients, presented by a physician.

Small discussion groups considered the community action aspects of the problem. Participants attempted to—

1. Identify available, qualified resources for nutrition services in the community.

2. Formulate plans for development and expansion of nutrition services for arthritic patients.

Nutrition education suggested.—Recommendations from the Institutes included in-service education programs for staffs of public health nursing agencies, hospitals, clinics, rehabilitation centers, and nursing homes; public forums on nutrition and diet in relation to arthritis; and diet counseling for arthritic patients referred by physicians.

Three months after the Institutes were held, enough community programs were underway in the State to convince public health personnel that the Institutes will encourage and expand nutrition services for people with arthritis.

Consumer and Food Economics Research Division, Agricultural Research Service, U. S. Department of Agriculture, in consultation with the Interagency Committee on Nutrition Education. (Printing approved by the Bureau of the Budget, June 11, 1963.)